

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,140	11/27/2001	Ofir Shalvi	TI-32258	9943
23494	7590 07/07/2006		EXAMINER	
TEXAS INSTRUMENTS INCORPORATED			NGUYEN, STEVEN H D	
P O BOX 655474, M/S 3999 DALLAS, TX 75265		ART UNIT	PAPER NUMBER	
2.122.13,			2616	
		DATE MAILED: 07/07/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/995,140	SHALVI ET AL.				
Office Action Summary	Examiner	Art Unit				
	Steven HD Nguyen	2616				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 26 Ag	oril 2006					
<i>,</i>	•					
<del></del>	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>23-31</u> is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>23-31</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers						
9) The specification is objected to by the Examine	r.	•				
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a)						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
) Notice of Draftsperson's Patent Drawing Review (PTO-948)    Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)    Paper No(s)/Mail Date   Notice of Informal Patent Application (PTO-152)						
Paper No(s)/Mail Date 6) Other:						

Art Unit: 2616

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 23-24 and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moore (USP 7035270) in view of Rabenko (USP 6834057).

Regarding claims 23-24 and 27, Moore discloses a method of data communication comprising allocating bandwidth "a first time slot" for a first data stream by a first network manager function (Fig 5, Ref 98 and 100, CMTS allocated the requested bandwidth for the device) such a Data Over Cable Service interface Specification (DOCSIS) manager (Fig 1, Ref 12, CMTS is DOCSIS) in a cable network (Fig 1, Ref 14); allocating bandwidth "a second time slot" for a second data stream by a second network manager function (Fig 5, Ref 102 or Fig 6, Ref 142 for using to allocate the requested bandwidth in the home network) being a home network manager (Fig 5, Ref 102 used for resource management or Fig 6, Ref 142 is IRM for allocated channel or time slot to the device) in a second network being home network (Fig 1, Ref 15) such Bluetooth (Fig 8 uses bear channel), wherein the first data stream has a higher quality of service assigned than the second data stream (Col. 5, lines 36-50, Col. 6, lines 1-14, voice is higher priority then data service); and transmitting data streams between the cable and home networks using corresponding bandwidth "time slots" (Fig 1, 6-9, the first and second data stream are exchanged between the cable network and home network via a home gateway).

Art Unit: 2616

However, Moore fails to fully disclose a bandwidth being time slot. In the same field of endeavor, Rabenko discloses a method and system for allocating bandwidth such time slots for a cable modem from CMTS in order to transfer the voice and data stream between the device in home network and cable network (Col. 3, lines 15-36, col. 4, lines 42-61, col. 5, lines 15-59).

Since, Moore suggests the use of DOCSIS specification to allocate the requested bandwidth for the cable modem by CMTS which is well known and expected in the art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method and system for allocating the bandwidth based on the time slots to the cable modem by CMTS based on DOCSIS as disclosed by Rabenko into the method and system of Moore. The motivation would have been to maintain a QOS service between the networks.

Regarding claim 28, Rabenko further teaches the home network manager (CM) is configured to determine timing of the first data stream by exchanging messages with a cable modem termination system in the cable network ("time synchronization" between CMTS and CM; 116 in fig. 3; col. 7 lines 31-38).

Regarding claim 29, Rabenko further teaches the home network is configured to determining timing of the first data stream using time-sync mechanism of DOCSIS (16 in fig. 10; col. 12 lines 19-23).

3. Claims 25-26 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moore and Rasenko as applied to claim 23 above, and further in view of Vaisanen (USP 6356967) or Yoon (USP 6687264).

Regarding claims 25-26 and 30, Moore and Rabenko fail to fully disclose the second time slot immediately precedes the first time slot or the first time slot immediately precedes the second time slot. In the same field of endeavor, Vaisanen discloses a method and system for transferring data between first and second networks "first bus segment A or B" wherein the second time slot immediately precedes the first time slot or the first time slot immediately precedes the second time slot and first and second time slots do not overlap (Fig 5) or Yoon discloses a gateway for transferring data between the time slots of the first and second wherein the second time slot immediately precedes the first time slot or the first time slot immediately precedes the second time slot and first and second time slot on to overlap (Fig 6).

Since, a method and system for transferring data between different networks by mapping time slot for one network to another are well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method and system for allowing the second time slot immediately precedes the first time slot or the first time slot immediately precedes the second time slot wherein first and second time slots do not overlap as disclose by Vaisanen or Yoon into the teaching of Moore and Rasenko. The motivation would have been to reduce the transferred delay by networks and maintain QOS service for the data streams.

4. Claim 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moore and Rasenko as applied to claim 23 above, and further in view of Momona (USP 6738816).

Moore and Rasenko fails to disclose the claimed invention. In the same field of Momona discloses allocating a third time slot for a third data stream, wherein the third time slot is used by

one or more devices associated with the home network to communicate with one or more of the home network, DOCSIS network, and other devices associated with the home network, and the third time slot immediately precedes one of the first and second time slots (a node with a resource manager (Fig 1, Ref 104 for allocating the channel for the devices within the network to communicate with other devices within the network wherein this allocated slot immediately precedes second slot which allocated for device that communicates with another device on the external network, Fig 3).

Since, a method and system for allocating the bandwidth for the nodes within network to communicate is well known and expected in the art and Moore suggests a home network includes resource manager for allocating the bandwidth for the devices to communicate with each other. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method and system for allocating the bandwidth for the nodes within network to communicate with each other as disclosed by Momona into the teaching of Moore and Rasenko. The motivation would have been to reduce transmission delay.

## Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lin (USP 6868072) discloses a method and system for using a resource manager within a home phone network to allocate the resource for the devices when they communicates with each other.

Art Unit: 2616

Okuyama (USP 6157650) discloses a method and system for mapping channel between the IEEE-1394 network with wireless network.

Roy (USP 6831899) discloses gateway for interfacing between CATV and IEEE-1394 network.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven HD Nguyen whose telephone number is (571) 272-3159. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (571) 272-3134. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Steven HD Nguyen Primary Examiner Art Unit 2616 June 29, 2006 Page 7